

**Amendments to the Specification:**

Please replace the paragraph beginning on page 4, line 10, with the following rewritten paragraph:

Preferably, the calculating means calculates the average value according to an amount of current detected by the field current detecting means right after the switching element switches its operation from ~~turning on-turning off~~ to ~~turning off-turning on~~ and an amount of current detected by the field current detecting means right before the switching element switches its operation from turning on to turning off. Therefore, accurate average value of the field current can be calculated.